

# PAPERWORK REDUCTION ACT SUBMISSION

**Please read the instructions before completing this form. For additional forms or assistance in completing this form, contact your agency's Paperwork Clearance Officer. Send two copies of this form, the collection instrument to be reviewed, the supporting statement, and any additional documentation to: Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW, Washington, DC 20503.**

1. Agency/Subagency originating request	2. OMB control number <span style="float: right;">b. <input type="checkbox"/> None</span> a. _____ - _____
3. Type of information collection ( <i>check one</i> ) a. <input type="checkbox"/> New Collection b. <input type="checkbox"/> Revision of a currently approved collection c. <input type="checkbox"/> Extension of a currently approved collection d. <input type="checkbox"/> Reinstatement, without change, of a previously approved collection for which approval has expired e. <input type="checkbox"/> Reinstatement, with change, of a previously approved collection for which approval has expired f. <input type="checkbox"/> Existing collection in use without an OMB control number For b-f, note Item A2 of Supporting Statement instructions	4. Type of review requested ( <i>check one</i> ) a. <input type="checkbox"/> Regular submission b. <input type="checkbox"/> Emergency - Approval requested by _____ / _____ / _____ c. <input type="checkbox"/> Delegated
	5. Small entities Will this information collection have a significant economic impact on a substantial number of small entities? <input type="checkbox"/> Yes <input type="checkbox"/> No
	6. Requested expiration date a. <input type="checkbox"/> Three years from approval date b. <input type="checkbox"/> Other Specify: _____ / _____
7. Title	
8. Agency form number(s) ( <i>if applicable</i> )	
9. Keywords	
10. Abstract	
11. Affected public ( <i>Mark primary with "P" and all others that apply with "x"</i> ) a. <input type="checkbox"/> Individuals or households d. <input type="checkbox"/> Farms b. <input type="checkbox"/> Business or other for-profit e. <input type="checkbox"/> Federal Government c. <input type="checkbox"/> Not-for-profit institutions f. <input type="checkbox"/> State, Local or Tribal Government	12. Obligation to respond ( <i>check one</i> ) a. <input type="checkbox"/> Voluntary b. <input type="checkbox"/> Required to obtain or retain benefits c. <input type="checkbox"/> Mandatory
13. Annual recordkeeping and reporting burden a. Number of respondents _____ b. Total annual responses _____ 1. Percentage of these responses collected electronically _____ % c. Total annual hours requested _____ d. Current OMB inventory _____ e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____	14. Annual reporting and recordkeeping cost burden ( <i>in thousands of dollars</i> ) a. Total annualized capital/startup costs _____ b. Total annual costs (O&M) _____ c. Total annualized cost requested _____ d. Current OMB inventory _____ e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____
15. Purpose of information collection ( <i>Mark primary with "P" and all others that apply with "X"</i> ) a. <input type="checkbox"/> Application for benefits e. <input type="checkbox"/> Program planning or management b. <input type="checkbox"/> Program evaluation f. <input type="checkbox"/> Research c. <input type="checkbox"/> General purpose statistics g. <input type="checkbox"/> Regulatory or compliance d. <input type="checkbox"/> Audit	16. Frequency of recordkeeping or reporting ( <i>check all that apply</i> ) a. <input type="checkbox"/> Recordkeeping b. <input type="checkbox"/> Third party disclosure c. <input type="checkbox"/> Reporting 1. <input type="checkbox"/> On occasion 2. <input type="checkbox"/> Weekly 3. <input type="checkbox"/> Monthly 4. <input type="checkbox"/> Quarterly 5. <input type="checkbox"/> Semi-annually 6. <input type="checkbox"/> Annually 7. <input type="checkbox"/> Biennially 8. <input type="checkbox"/> Other (describe) _____
17. Statistical methods Does this information collection employ statistical methods <input type="checkbox"/> Yes <input type="checkbox"/> No	18. Agency Contact (person who can best answer questions regarding the content of this submission)  Name: _____ Phone: _____

## 19. Certification for Paperwork Reduction Act Submissions

On behalf of this Federal Agency, I certify that the collection of information encompassed by this request complies with 5 CFR 1320.9

**NOTE:** The text of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3), appear at the end of the instructions. *The certification is to be made with reference to those regulatory provisions as set forth in the instructions.*

The following is a summary of the topics, regarding the proposed collection of information, that the certification covers:

- (a) It is necessary for the proper performance of agency functions;
- (b) It avoids unnecessary duplication;
- (c) It reduces burden on small entities;
- (d) It used plain, coherent, and unambiguous terminology that is understandable to respondents;
- (e) Its implementation will be consistent and compatible with current reporting and recordkeeping practices;
- (f) It indicates the retention period for recordkeeping requirements;
- (g) It informs respondents of the information called for under 5 CFR 1320.8(b)(3):
  - (i) Why the information is being collected;
  - (ii) Use of information;
  - (iii) Burden estimate;
  - (iv) Nature of response (voluntary, required for a benefit, mandatory);
  - (v) Nature and extent of confidentiality; and
  - (vi) Need to display currently valid OMB control number;
- (h) It was developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected (see note in Item 19 of instructions);
- (i) It uses effective and efficient statistical survey methodology; and
- (j) It makes appropriate use of information technology.

If you are unable to certify compliance with any of the provisions, identify the item below and explain the reason in Item 18 of the Supporting Statement.

Signature of Senior Official or designee

Date

Agency Certification (signature of Assistant Administrator or head of MB staff for L.O.s, or of the Director of a Program or Staff Office)	
Signature	Date
Signature of NOAA Clearance Officer	
Signature	Date

## **SUPPORTING STATEMENT**

### **Socioeconomic Monitoring Program for the Florida Keys National Marine Sanctuary**

#### **A. Justification**

1. The National Marine Sanctuaries Act (16 USC 1431, et seq.) authorizes the use of monitoring within National Marine Sanctuaries (NMS). The Florida Keys National Marine Sanctuary and Protection Act (Public Law 101-605, Sec 7 (5)) also authorizes monitoring. The Management Plan for the Florida Keys National Marine Sanctuary (FKNMS) established 18 Sanctuary Preservation Areas (SPAs) and one Ecological Reserve (ER) that are “no take” zones. All consumptive or take activities were displaced from these zones. These special zones were also created to resolve user conflicts. In creating these special zones, socioeconomic impact analyses were done as required under the National Environmental Policy Act (NEPA). In addition, a Regulatory Impact Review and an Initial and Final Regulatory Flexibility Analysis (if small businesses are potentially impacted by the no take regulations) were conducted. However, many of the benefits and costs identified in these analyses are speculative in nature and there is therefore a great deal of uncertainty about both the benefits and the costs. In response to public concerns about the socioeconomic impacts of many of the elements of the FKNMS management plan and especially the “no take” zones (e.g., SPAs and ERs), a socioeconomic element was included in the ecological monitoring program. Dr. Vernon R. (Bob) Leeworthy, Chief Economist, NOAA, National Ocean Service, Special Projects Office leads the Socioeconomic Monitoring Program for the FKNMS.

In 1998, 50 stakeholders and social scientists met for a three days in a workshop and established a set of recommendations for what should be measured in the Socioeconomic Monitoring Program and how frequently the measures should be taken. The literature was reviewed by a team of social scientists and a gap analysis was performed. What was currently known and an assessment of the gaps in knowledge were presented to all the workshop participants two weeks before the workshop. 108 recommendations were made, but workshop participants preferred to leave it to FKNMS management to establish priorities. Two top priorities are to; 1) monitor the financial performance of the commercial fishing operations that were displaced from the “no take” zones to test the hypotheses that there are short term losses and/or long term gains to commercial fishermen because of the zones and 2) monitor the use, perceptions of users as to quality of the SPAs and ERs, and changes in market and economic values associated with SPA and ER uses to test the hypotheses that user conflicts were resolved and/or that there would be both short term and long term gains to non consumptive users and net gains to the local economy.

2. Three data collection efforts are proposed here that will provide some of the necessary information to accomplish the above tasks; 1) Commercial Fishing Panels, 2) Dive Shop Logs, and 3) Sanctuary Preservation Area and Ecological Reserve Users.

##### **1) Commercial Fishing Panels**

There are four commercial fishing panels; 1) Commercial fishermen that were displaced from the Sambos Ecological Reserve, 2) Commercial fishermen that fished in the Tortugas Ecological Reserve prior to establishment (yet to be established), 3) General commercial fishermen in Monroe County that had not fished in any of the no take zones before their creation, and 4) Marine Life Collectors. Marine Life Collectors are those collecting for the aquarium business. Panel size is expected to be between 5 and 10 fishing operations per panel. Selection is based on review of Florida Marine Research Institute (FMRI) fish tickets which record the catch and location of catch for each fishermen. For the three panels that address displaced fishing due to the zones, FMRI records are used to confirm the amount of dependence on the special zones before displacement on July 1997 (i.e., when the no take regulations took effect in the Sambos ER and the SPAs). Panel members are recruited and must sign an affidavit that allows a researcher (under contract to NOAA) to gain access to the fishing operations fish ticket data. Panel participation is voluntary.

Data collection is done face-to-face and the panel member is not asked to fill-out any forms. Instead, the data collector may mail the commercial fisherman a list of the types of information that is being sought and arranges for an interview time and place. For each operation, information on catch, effort, revenues, operating and capital costs, and investment (replacement costs of boats and fishing equipment) are obtained on an annual basis. This information will allow for a financial performance analysis.

*Socioeconomic Profile.* This form consists of 12 questions. The socioeconomic profile questions provide information to compare panel members with the general commercial fishing population. The general commercial fishing population of Monroe County/Florida Keys was done by researchers at the University of Florida and the University of Miami in 1995 and in 1998 (before and after the management plan for the FKNMS went into effect) using the questionnaire that will be used here. Updates are planned for 2000. We adopt the questionnaire designed and implemented by previous researchers to maintain the ability for comparisons. This questionnaire is also submitted in more general format to cover all National Marine Sanctuaries in OMB Approval package entitled "National Marine Sanctuaries – Socioeconomic Impacts of Marine Reserves. We have submitted here because it is also an integral part of the data collection being planned here.

Question 1 asks for the age of the fisherman and Question 2 asks for race/ethnicity. Question 3 asks for the number of family members supported by the fisherman.

Question 4 asks about memberships in any groups. Chambers of Commerce, Environmental groups, the Monroe County Commercial Fishermen, Inc. and the Organized Fishermen of Florida (OFA) are the main groups that fishermen belong to in Monroe County.

Question 5 asks if the fisherman belongs to a fish house. Many fishermen are directly employed by fish houses and others simply sell their catch to a fish house without a formal agreement requiring them to land the fish with the fish house. This item adds information about where the fish are landed and what distributors/wholesale processors might be impacted.

Question 6 asks for the fisherman's primary hauling port/dock. This provides the connection from where the catch is obtained to where it is landed (i.e., where it has economic consequences).

Questions 7 asks for the fisherman's years of experience fishing in Monroe County. This information is important for assessing the fisherman's ability to adapt to changes (here their ability to change and their expected success in moving to other fishing grounds).

Questions 8 asks for the replacement value of the gear and vessels owned. This information is used in assessing whether there are economic rents earned in the fishery. Economic rents are appropriate to include in benefit-cost analyses. This information is also important for assessing financial performance.

Question 9 asks for items of cost that are not trip specific. The costs are annual expenses and include such items as maintenance and repair on vessels, traps and other gear, docking fees and fish house fees. Again, this information is critical for financial performance analysis.

Questions 10, 11 and 12 address the economic dependency of the fisherman on commercial fishing. Question 10 asks the percentage of the fisherman's income that is derived from commercial fishing. Question 11 asks for what the fisherman considers to be the best description of his or her occupation. The key distinction is whether they are part time or full time in the commercial fishery. Some charter boat operations derive a portion of their income from the commercial fisheries because they sell some of their catch. Some fishermen that are normally considered recreational fishermen may on occasion sell their catch. In Florida, a person may obtain a permit that allows them to sell their catch for as little as \$25. Thus some recreational fishermen may be commercial fishermen for some portion of their catch. Question 12 asks for the percentage of their income derived from fishing in Monroe County.

*Catch and Effort by Large Spatial Zones.* This is not a questionnaire but is a framework for obtaining information. The data collector sits down with the fisherman and with the use of maps showing the large spatial zones and the fisherman's catch records provides their total catch (in pounds) for each species or species group and the percentage of the catch in each large spatial area. The percents across large spatial areas must sum to 100 percent for each species or species group. Seven zones have been established for the Florida Keys by previous researchers and we will continue to use these zones to maintain comparability. The information gathered here is important for establishing the fisherman's knowledge of alternative fishing sites and is important input into assessing fishermen's ability to relocate to other fishing grounds due to displacement from the "no take areas". Proponents of the "no take areas" have argued that commercial fishermen could simply replace their lost catch from other areas. Opponents counter that crowding effects will occur and not only will those displaced not be able to replace lost catch from other areas, but that there will be additional losses as those displaced compete with fishermen for limited available catches in the other areas. Monitoring the distribution of catch over time will aid in testing these hypotheses.

Marine Life Collectors generally report their catch by numbers of different species rather than pounds. We use the species group classifications used by FMRI in their trip ticket information system.

*Trip Costs by Species or Species Group.* As with Question 8 and 9 in the Socioeconomic Profile, this information obtains costs. Here the variable or trip costs are obtained for a typical trip for each species or species group. Trip cost items include fuel and oil, ice, bait, food & supplies, spotter plane, other, and labor or crew shares. These questions obtain the information critical to the financial performance analysis.

## 2) Dive Shop Logs

All the dive shops in the Key Largo area of the FKNMS will be asked to fill-in dive logs for use of the SPAs (no take areas). Volunteers or student interns will collect the monthly logs and send them to NOAA for data entry. In discussions with the dive operations, some prefer to fax their logs on a monthly basis. We also expect some will want to e-mail their logs on a monthly basis. We will accommodate all methods of response. Logs include information on location of each dive, number of passengers that dived the location, how many were snorkelers and how many were scuba divers, the date and time of arrival and departure from each dive site, and whether they used a mooring buoy, anchored or drifted. Volunteers will also ask to review dive shop past log books to develop historical use patterns. A Nature Conservancy student intern interviewed the owners/managers of all but three dive shops in Key Largo, Florida. All those interviewed said that they keep log books with the following information: 1) Date, 2) area visited, 3) number of people on-board, 4) activity (e.g., snorkeling, scuba diving and sightseeing), 5) whether used mooring buoy, anchored or drifted, 6) time spent at a given location, and 7) weather conditions. Thus, it appears the dive shops already collect the information that we will be requesting and the burden should be minimal.

Why only Key Largo ? We are testing a methodology for estimating total use by season and type of use in the SPAs of the Florida Keys. We have selected the Upper Keys of the Florida Keys to test the methodology. Dive shop users account for a little over 50 percent of all diving in the Upper Keys, the remaining use comes primarily from private household owned boats and a minor amount from rental boats. Satellite images are being taken on four weekdays and two weekend days per month for three SPAs in the Upper Keys. A method using the combination of satellite data and dive shop logs is being developed to estimate total SPA use. Should this methodology prove successful, it will be proposed for implementation throughout the rest of the FKNMS.

## 3) Sanctuary Preservation Area and Ecological Reserve Users

Survey samples of all recreational users of Sanctuary Preservation Areas and Ecological Reserves (no take zones) will be implemented. On-site interviews using a questionnaire will be conducted for a sample of visitors (non-residents of Monroe County) to get profiles of users and their use. A mailback questionnaire will be used to get information on users ratings of importance and satisfaction of various

natural resource attributes (e.g., water clarity, coral cover, number and diversity of sealife, etc.). For residents of Monroe County, a telephone survey will be used to obtain information for developing profiles of users and their use of the sanctuary preservation areas and ecological reserves. A mailback questionnaire will be used to obtain the information on importance and satisfaction with natural resource attributes. Data collection will be repeated every three years. First application was done in 1995-96 under OMB Approval Number 0596-0110.

We have decided to utilize the surveys being proposed under a separate OMB Approval package entitled “South Florida Artificial and Natural Reefs – Economic Valuation Study”. This avoids duplication and saves both surveying costs and total burden hours required. See detailed discussion in Section A, item 4 below.

The visitor and resident survey questions are the same and, the questions are exactly the same as was implemented in the Florida Keys in 1995-96 under OMB Approval 0596-0110. The visitor survey will be implemented under the direction of Hazen and Sawyer (the contractor), while the resident survey will be done by Florida State University’s Department of Hospitality Administration, Survey Center.

The question 1a and 1b. have 25 items to be rated on a 5 point Likert scale for importance and satisfaction. Responses of not applicable (n/a) and don’t know (dk) are also allowed. Priority elements for NOAA’s monitoring efforts include items the following 8 items: 1) Clear water (high visibility), 2) Amount of living coral on the reefs, 5) Many different kinds of fish and sea life to view, 6) Many different kinds of fish and sea life to catch, 7) Large numbers of fish, 8) Opportunity to view large wildlife: ( manatees, whales, dolphins sea turtles), 24) Parks and specially protected areas, 25) Mooring buoys near coral reefs. The other 17 items were on the original list implemented in 1995-96 in a partnership with the Monroe County Tourist Development Council. The Monroe County Tourist Development Council is also a partner in this application and we will include all the items to also address their needs and maintain consistency on the order of appearance of the items. Further, it is untested whether dropping any items from the list might lead to relatively lower or higher scores for a particular item. This is another argument supporting the choice to maintain consistency with earlier efforts so that repeated measurements can be compared across time.

The above will yield repeated measurements for all boating visitors and resident of Monroe County. However, in 1995-96, the FKNMS management plan was still not finalized and the creation of the SPAs and ER were not final and they were not yet marked with buoys. In this application, we will obtain information from the on-site component of the survey about SPA and ER use, this will provide us the ability to segment SPA and ER users and establish a baseline of importance/satisfaction scores for this group.

3. The commercial fishing panels and the dive log data collections do not use any automated, electronic, mechanical, or other technological techniques or other forms of information technology. However, we are remaining flexible on how dive shops prefer to respond. In discussions with most of the dive operations, we learned that many prefer to fax either weekly or monthly dive logs. We expect that some may eventually want to use e-mail. We plan to accommodate all methods of communicating results that the dive shops prefer. In the commercial fishing panel study, burden is reduced by employing a data collector that sits down with fishermen and works with the fishermen to compile the information. The respondent does not waste time reading instructions and figuring out how to provide and code the information. The data collector is there to facilitate the information collection and does all the coding. Appointments to meet with the data collector are also done to accommodate the working schedule of the fisherman to also lower the burden. For the dive shops, the dive shops fill out logs similar to their existing logs and volunteers or student interns collect them at their businesses. Data entry into computer data bases is done at NOAA.

For the SPA and ER users surveys, maps are used to identify the SPAs and ERs to aid respondents. The resident survey is a telephone/mail back survey. The telephone survey questions are programmed

into a computer aided telephone survey instrument (CATI) system. This allows for complex skip patterns and screening.

4. The commercial fishing panels and the dive shop logs are not duplicative of any other known data collections. On the case of the commercial fishing panels, part of the data collection relies on the existing fish ticket system for reporting commercial fishing catch in Florida by FMRI. The dive shop logs are somewhat new, but most dive shops already keep some form of log books. Our log sheets are designed to complement existing logs. The dive shops have reviewed our dive logs and agree that they do not impose much burden and they all agree the information is critical to management of the SPAs and ERs and are quite willing to participate.

The survey of Sanctuary Preservation Area and Ecological Reserve Users has overlap with another effort we are conducting for which we have submitted a separate OMB approval package (South Florida Artificial and Natural Reefs – Economic Valuation Study). It is possible that both of these efforts could be combined. The issues to address are burden per respondent and effective sample sizes.

The burden issue may not be a major issue since the current plan for the South Florida Artificial and Natural Reef Study does not include a mail back survey. We could ask those surveyed on-site, in the non resident boater survey, and those interviewed by telephone, in the resident survey if they would participate in the mail back portion of the survey. The South Florida Artificial Reef and Natural Reef Study includes sample from Palm Beach, Broward, Miami-Dade and Monroe counties, while the SPA and ER use study only includes Monroe County.

Sample sizes are potentially more of a problem. SPAs and ERs are no take areas and thus users that engaged in fishing are not part of the relevant population. So the relevant population is restricted to divers (snorkelers and scuba divers) and glass-bottom boat riders. For the non resident boating visitors, the South Florida Artificial and Natural Reef Study has interviews planned for 400 divers and 100 glass-bottom boat riders for each of the two seasons (e.g., winter and summer). The 1995-96 survey yielded mail back response rates of 47.1 % for the summer season and 52.6 % for the winter season. Applying these response rates would yield expected sample sizes of about 188 divers and 47 glass-bottom boat riders in the summer season and 210 divers and 53 glass-bottom boat riders in the winter season. One problem is that not all of these will be users of the SPAs and ERs. From a past study using aerial fly over and surface surveys, we estimate that 60-80 percent of all diving use is in the SPAs and ERs and we think all the glass-bottom boat rides go into the SPAs and ERs. So we could expect between 113 and 150 divers in the summer season and between 126 and 168 divers in the winter season. This should yield adequate sample sizes for the importance/satisfaction analysis. Therefore, we will try and attach the importance/satisfaction mail back survey of non residents of Monroe County to the non resident boating visitors survey of the South Florida Artificial and Natural Reef Study as specified in PRA – South Florida Artificial and Natural Reefs – Economic Valuation Study.

The resident survey of the South Florida Artificial and Natural Reef Study proposed a telephone sample size of 500 resident boaters in Monroe County. A previous telephone/mail back survey of participants in outdoor recreation for Monroe County yielded 82 percent were willing to provide their names and addresses and participate in the mail back portion of the survey, but only 50 percent of these responded, yielding a net response rate of 41 percent. Applying this to the 500 proposed sample yields an expected sample size of 205 completed mail back interviews. Not all of these will be SPA and ER users. If 60 percent of resident boaters use the SPAs and ERs, this would yield an effective sample size of 123. A sample size 100 is considered the lower threshold for the importance/satisfaction analysis and the expectations exceed this using the above planning assumptions, but not with much leeway if the above planning assumption do not hold. To resolve this, we propose to increase the sample of resident boater in Monroe County in the South Florida Artificial and Natural Reef Study to 800. Sampling an additional 300 boating households in Monroe County in the South Florida Artificial and Natural Reef Study will replace the 500 originally planned if they were separate studies. This will both reduce burden on respondents and save public funds by combining survey efforts.



5. The data collection is not expected to have a significant impact on small entities such as small businesses. Most of the commercial fishing operations are small businesses as are dive shops. In the case of the commercial fishing panels, however, by employing a data collector we minimize the burden on the respondent. We think we can keep the burden to an average of 3 hours per respondent. Also, this data collection is something that the commercial industry asked us to do. Thus the respondents have a reason to participate and this will ensure high participation rates. The data collection proposed here is not part of a strategic research project where the respondents are not sure what the information will be used. The respondents will all know why they are participating. NOAA has made a commitment to the commercial fishing industry to conduct this kind of monitoring and this data collection delivers on that promise.

In preliminary discussions with the dive shops in Key Largo, many at first thought that the dive logs would be a burden and that they simply would not have the time. A student intern from The Nature Conservancy, Florida Keys showed them a proposed dive log and asked them if they currently keep dive logs and if they had historical data. All but three dive shops were interviewed and they all already keep all the information that would be requested in the proposed dive logs. The dive shops concluded then that this would be no great burden since they already do it. They are only concerned that we protect the privacy of their individual business data since the dive business is extremely competitive and they do not want their competitors to have access to their data on business volume.

6. NOAA and the managers of the FKNMS have agreed to include socioeconomic monitoring in the ecological monitoring program for the FKNMS. The information collection proposed here delivers on items identified by the user groups as necessary elements of a socioeconomic monitoring program. Many federal agencies that manage natural resources have been tasked by the National Academy of Sciences to adopt adaptive management practices. Adaptive management requires monitoring, both ecological and socioeconomic, to be able to assess what is happening to both the natural resources and the humans that depend upon those resources. The FKNMS has taken important steps along these lines and is living up to their compact with the stakeholders that have all participated in developing the management plan for the FKNMS and helped design the Socioeconomic Monitoring Program. Not completing these data collections would leave NOAA and the FKNMS in violation of these agreements.
7. Data collection will be consistent with OMB guidelines.
8. PRA Federal Register notice included. No comments were received.

Efforts to consult with other persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions, the amount of burden to be imposed, and the ways to minimize burden are described in items 4 and 5 above.

9. No payment or gifts are given to respondents in either the commercial fishing panel study or to the dive shops. In the survey of nonresident boating visitors and the survey of resident boaters, the local community may develop a sweepstakes/lottery as an incentive to return their mail back questionnaires. This was done in the 1995-96 survey under OMB Approval 0596-0110. At this time, we are uncertain if the local business community will want to do this. This project is a community-based study conducted with partnerships. We have to maintain a certain amount of flexibility working with the local community.
10. The commercial fishing panel participants have all been involved in similar data collection efforts and understand the data confidentiality issues. Our data collector, under contract to NOAA, assigns each operation a unique identification code for all data bases. The code book that links the operation to the unique identification number is never provided to NOAA. This book remain in the hands of the contractor. The code book contains the name, name of business, address and telephone number and the data base identification number corresponding to each name, name of business, address and telephone number. The data bases for distribution will contain the Identification numbers, but the names, names

of businesses, addresses and telephone numbers will be destroyed. The remaining data will be available for distribution.

We will provide a separate sheet with each data collection (included in package) authorities, the way in which the information will be used to further performance or agency functions, provide an estimate of burden of time, name and address of sponsoring office, assurance that responses are voluntary, and the extent of confidentiality. The extent of confidentiality is assured by exemption under the Freedom of Information Act (5 USC 522(b)(4) concerning trade secrets or proprietary information, such as commercial business and financial records.

For the dive logs, the dive shops are not concerned that NOAA has their individual business data. They simply want assurance that their individual business data is not given out to others. The dive industry in the Florida Keys is very competitive and each business does not want their competitors to know their number of customers. All data bases used for research and available for distribution, will not contain business name, address or telephone number.

For the survey of non resident boating visitors in Monroe County a respondent card (YELLOW CARD) is used that contains a Privacy Act Statement. The card is handed to the respondent before the interview begins. The statement informs the respondent that participation is voluntary and there are no penalties for not answering any of the questions. They are also informed about the approximate length of the interview and a statement about the confidentiality of their information. They are reminded of this again before they are asked the questions in the demographic section.

For the resident boating household telephone/mailback survey, a statement is read over the telephone to the respondent discussing all the elements included in the Privacy Act Statement presented to non residents on the YELLOW CARD. They are asked if they want to know who to contact about the data collection and if they say yes, provided with the appropriate contact information.

11. No questions included in any of the data collections proposed here would be classified as sensitive. Most are standard questions used elsewhere. All identifying information for an individual or business are considered sensitive to protect confidentiality and will not be included in any of the data bases for release to the public.

## 12. Burden Hours

### Estimated Number of Respondents:

- A. Commercial Fishing Panels: Approximately 40
- B. Dive Shops: 30
- C. SPA and ER Users:
  - 1) Visitors: 0 additional on-sites (combine with South Florida Artificial and Natural Reef Study) 418 mail backs
  - 2) Residents: 300 additional telephone interviews (combine with South Florida Artificial Reef Study) and approximately 200 mail backs

### Estimated Time Per Response:

- A. Commercial Fishing Panels: 3 hours
- B. Dive Shops: 10 hours
- C. SPA and ER Users:
  - 1) visitors: on-site questionnaire 20 minutes mail back questionnaire: 20 minutes
  - 2) residents: telephone survey 20 minutes mail back questionnaire: 20 minutes

Estimated Total Annual Burden Hours:

- A. Commercial Fishing Panels: 120 hours
- B. Dive Shops: 300 hours
- C. SPAs and ER Users: 305 hours

Total.....725 hours

Estimated Total Annual Cost to Public: 725 hours (only one time application, no additional costs expected on respondents).

In our original application for burden hours, we estimated 920 hours. The reduction is due to combining the SPA and ER Users Survey with the South Florida Artificial and Natural Reef Study which reduces total burden hours required.

For the commercial fishing panel data collection, the above estimates were produced in consultation with Manoj Shivilani of the University of Miami. Mr. Shivilani has done studies that included data collection similar to what is being proposed here. The questions in the socioeconomic profile of commercial fishermen and the data collection methods for catch and effort for the commercial fisheries were previously done in a Sea Grant project in Florida and published in a Sea Grant report (J. Walter Milon, Daniel O. Suman, Manoj Shivilani and Kathryn A. Cochran, Commercial Fisher' Perceptions of Marine Reserves for the Florida Keys National Marine Sanctuary, Florida Sea Grant TP-89, December 1997, Florida Sea Grant College, University of Florida, Gainesville, Florida). The data collection was done by Manoj Shivilani at the University of Miami using the same data collection method proposed here. Therefore we are fairly confident in the estimates of burden hours.

For the SPA and ER Users Survey, Dr. Frederick W. Bell at the Department of Economics, Florida State University was consulted. Dr. Bell has conducted numerous surveys and designed the questionnaires used in this application which were modifications from his study on Artificial Reef in Northwest Florida. Dr. Bell was especially attentive to the time requirement of each questionnaire and dropped many of the questions that were included in the Northwest Florida Study that did not yield information directly needed for the economic valuation tasks.

The mail back component of the SPA and ER users was previously used in a study of the Florida Keys in 1995-96 under OMB Approval # 0596-0110. This was pre-tested face-to-face before deciding to use the mail back approach. The pre-test revealed that respondents liked this portion of the survey, but wanted to take their time with filling it out. We decided then to use the mail back approach. We do have current approval for an on-site CUSTOMER SURVEY that has almost all the same questions that will be used in the on-site portion of the interview and the importance/satisfaction questions used in the mail back survey under a joint U.S. Forest Service/NOAA OMB Approval # 0596-0110 (approved for an additional three years). The reason for this separate submittal is the total design in order to address artificial and natural reef use in the South Florida Artificial and Natural Reef Study and the SPA and ER Users Study are different enough to probably warrant separate approvals. In addition, the South Florida Artificial and Natural Reef Study includes contingent valuation (CV) questions. Under OMB Approval # 0596-0110, separate approval is required of CV questions on a case-by-case basis.

13. Estimated Total Annual Cost to Public: Only one time application, no additional costs expected on respondents.

SPA and ER Users surveys use return postage-paid envelopes and so there are no costs to respondents. No new recordkeeping requirements are imposed on respondents. Dive shops already maintain dive logs.

14. Annualized Cost to the Federal Government:

Socioeconomic Monitoring Program – Florida Keys National Marine Sanctuary

Contracts for Data Collectors.....	\$69,000
a. Contracts for Commercial Fishing Panels.....	\$49,000
b. Contract for SPA and ER Users.....	\$20,000
NOAA Staff time in developing questionnaires, maps and contract	
Development and oversight.....	\$2,715
a. GS-14 Economist 52 hours * \$39.20/hour.....	\$2,038
b. GS-12 Economist 25 hours * \$27.08/hour.....	\$677
Travel.....	\$2,500
Total Cost to Federal Government.....	\$74,215

15. This is a program change resulting from new requirements. The FKNMS has created the Socioeconomic Monitoring Program as a component of the Ecological Monitoring Program to address the impacts of management strategies on both the natural resources and human environment.

16. Outline of Plan for Tabulation and Publication of Results

A. Commercial Fishing Panels

Information is collected annually. Financial performance analysis requires at least two years of data for comparison. Historical information for base year 1998 must first be collected, then 1999 and 2000 information will be collected. An assessment will be conducted that will include assessments of the trends in the local, regional and state fisheries, and changes in other regulations that might be affecting the commercial fisheries, plus weather events (e.g., hurricanes) and other environmental events that may have affected the fisheries in the region. The objective is to be able to determine the separate effects of the SPAs and ERs on the financial performance of commercial fisheries. Expect preliminary analysis of three year period to be completed in June 2001. The result of this assessment will be to test the hypothesis of whether the effect of the SPAs and ERs was to cause short term losses to commercial fishing operations. Annual reports are presented at the Zone Performance meetings each year (usually February) held by the FKNMS.

The data collection is expected to go on past the first three years to be able to test whether there are long term gains from the SPAs and ERs to the commercial fisheries.

B. Dive Logs

Information will be collected annually. Trends in dive shop usage will be reported at the Zone Performance meetings held every year (usually February) by the FKNMS. The data will be combined with satellite data to test a methodology for estimating total use of the SPAs and ERs. At this time, due to problems with getting the satellite information processed, we don't have a time frame for when this evaluation will be conducted or completed.

C. SPA and ER Users Survey

Since we are combining this with the South Florida Artificial and Natural Reef – Economic Valuation Study, the time frames will adhere to that study. Contract to conduct the study (Contract between Broward County Florida and Hazen and Sawyer) includes the following time table:

A. Final Sample Designs and Survey Instruments.....	May 31, 2000
B. Visitor Survey – Summer.....	September 22, 2000
C. Resident Survey.....	November 1, 2000
D. Visitor Survey – Winter.....	April 28, 2001
E. Draft Report.....	June 30, 2001
F. Final Report.....	July 31, 2001

17. Will display OMB approval number on forms.

18. No exceptions to Item 19 on OMB 83-1.

## **B. Collections of Information Employing Statistical Methods**

1. For the commercial fishing panels a sample of 5 to 10 fishing operations will be selected for each panel. Selection will be based on representative set of operations for each panel. This will be done by accessing the fish ticket data system maintained by the Florida Marine Research Institute (FMRI). Fish tickets report type of species caught, amount of species caught and location of where caught. For the Sambos Ecological Reserve panel, those that fished in the Key West region must be first screened for those that fished in the Sambos before July 1997. A representative panel of fishermen must then be assembled that agree to be part of the long term panel research. The same procedure is followed for the Tortugas Ecological Reserve panel. For the panel of general commercial fishermen in Monroe County that did not fish in any of the zones before their creation, a panel is constructed that generally is representative of the entire commercial fishery in Monroe County before July 1997. A similar procedure is followed for creating the Marine Life Collectors panel. These panels are then interviewed each year.

For the dive shops, sampling methods are not used. Agreements have been made that all dive shops will voluntarily participate in filling-out the dive logs. This will be a census of the dive shops in the Key largo area. No statistical methods are required for this data. Statistical methods will be used in testing a methodology of combining satellite information with the dive log information in deriving estimates of total use in the SPAs and ERs.

For the SPA and ER Users, the same sampling methodologies that will be used in the South Florida Artificial and Natural Reef –Economic Valuation Study (a currently submitted separate OMB Approval package). Below this is repeated.

### **1) Survey of Local Resident Reef Users**

This survey will use a telephone/mail back survey of 800 permanent resident households that have registered boats greater than 14 feet in length in each of the four counties in the study area. Boat registration files are maintained by the State of Florida. The boat registration file includes all boats registered in each county. The relevant population is only a portion of the total number of registered boats in each county. First, boats registered in the county less than 14 feet in length are eliminated based on past research on boats used in the marine offshore environment. Second, boats registered to individuals or households with permanent addresses outside the county where registered are eliminated. From the remaining list, it must be determined what percent of the boats are utilized in the marine environment in the county of permanent residence. 800 households are then selected randomly from this list for Monroe County.

The importance/satisfaction questions for SPA and ER Users are included in the mail back questionnaire. With expected response rates to the mail back questionnaire we hope to get around 200 completed mail backs. This is accomplished by increasing the South Florida Artificial and Natural Reef Study's sample size from the previously planned 500 household for Monroe County to 800 based on the assumptions given in Section A, item 4 above.

### **2) Survey of Non Resident Boating Visitors**

The sampling sites and site quotas to achieve representative samples will be done similarly to the general visitors with the use of local knowledge. Additional information is available from NOAA's National Marine Fisheries Service on the use from different access points in each county and by mode of fishing. The sample of boating visitors for each county will be stratified by season, activity (fishing,

diving, glass-bottom boat rides) and by boat mode. Table 1 below shows the sampling quotas established for these sample stratifications.

Table 1. Proposed Sample Sizes for Visitor and Resident Surveys

	Summer		Winter		Total
<b>General Visitors</b>	400 x 4 =	<b>1,600</b>	400 x 4=	<b>1,600</b>	<b>3,200</b>
<b>Boating Visitors</b>					
<b>Fishing</b>		<b>1,600</b>		<b>1,600</b>	<b>3,200</b>
Charter	100 x 4 =	400	100 x 4=	400	800
Party	100 x 4 =	400	100 x 4=	400	800
Own	100 x 4 =	400	100 x 4=	400	800
Rental	100 x 4 =	400	100 x 4=	400	800
<b>Diving</b>		<b>1,200</b>		<b>1,200</b>	<b>2,400</b>
Charter/Party	100 x 4 =	400	100 x 4=	400	800
Own	100 x 4 =	400	100 x 4=	400	800
Rental	100 x 4 =	400	100 x 4=	400	800
<b>Glass-bottom Boats</b>	100 x 1 =	<b>100</b>	100 x 1	<b>100</b>	<b>200</b>
<b>sub-total Boating</b>		<b>2,900</b>		<b>2,900</b>	<b>5,800</b>
<b>Total - All Visitors</b>		<b>4,500</b>		<b>4,500</b>	<b>9,000</b>
<b>Residents-Boaters</b>					<b>500 x 3=1,500</b>
					<b>800</b>
					<b>Monroe</b>
					<b>County</b>

Notes: Number of interviews times number of counties. There are four counties.

Glass-bottom boat activity assumed only in Monroe County.

## 2. Describe the procedures for collecting:

Commercial Fishing Panels. See item 1 above.

Dive Logs. No sampling used. A census approach is used here. See item 1 above.

Survey of SPA and ER Users. For the importance/satisfaction information proposed here, we attach the mail back to the telephone survey of resident boaters and the on-site survey of non resident boaters in Monroe County. Monroe County is a sub-set of a four county study being conducted under separate OMB Approval entitled "South Florida Artificial and Natural Reef – Economic Valuation Study". The different element of that survey are discussed below.

### 1) Survey of Resident Reef Users

From the boat registration file for the State of Florida, as described in item 1 of this section, 800 households will be randomly selected and telephoned in Monroe County. This sample is used to

obtain the percentage of registered boats that are used in the marine environment in Monroe County. Then conditional on being used in the marine environment in Monroe County, the average number of days of use of these boats on artificial and natural reefs is then used to derive estimates of the number of party-days of use on artificial and natural reefs. To derive estimates of person-days of use on artificial and natural reefs, party-days on artificial reefs is multiplied by the average party size using the boat from the county where the boat is registered and similarly for person-days on natural reefs. This establishes how the population of boats registered in Monroe County and used in the marine environment can be used to derive estimates of the number of party-days and person-days of use on artificial and natural reefs in Monroe County. This is a more general description. The actual procedures will do this by activity (e.g., fishing and diving). Additional information is also obtained on SPA and ER use for snorkeling and scuba diving. Similar procedures are used to estimate the amount of SPA and ER use.

The mail back survey is sent to all those that participated in boating activities in Monroe County. The telephone survey information provides the necessary information to segment and aggregate and weight the data.

## 2) Survey of Non Resident General Visitors

This survey relies on selecting a set of sample sites and setting quotas for each sampling site to get a representative sample of non resident general visitors, as explained in item 1 of this section above. At each site, all people are screened for residency i.e., if they are a permanent resident of the county where the interview takes place. If they are not permanent residents of the county where interviewed, then they are screened using an exit condition (i.e., are they ending their visit to the county where interviewed). In usual circumstances, the day and time when selected would be the approximate time of ending the visit. However, extensive previous research experience in this area suggests a more flexible approach. First divers need 24 hours of off-gassing of nitrogen in their blood before they can fly. Second, for people staying at campgrounds, it is not convenient to interview them as they are packing-up or just completed packing-up. Experience has been to interview them the night before they plan to pack-up and leave. For interviews conducted in the evening, the person must be leaving the county before noon the next day. This minimizes the amount of activity the respondent must speculate about doing. For persons other than scuba divers or people staying at campgrounds, the exit condition is the day of the interview.

For estimating the number of visitors, the capacity utilization model (CUM). This model was used in the Florida Keys and compared against a more sophisticated stratified random sample of visitors that accessed the Florida Keys by highway, airport and cruise ship (see Vernon R. Leeworthy, Technical Appendix: Sampling Methodologies and Estimation Methods Applied to the Florida Keys/Key West Visitor Surveys, December 1996, NOAA, Silver Spring, MD). It can be found at (<http://www-orca.nos.noss.gov/projects/econkeys/econkeys.html>). The methods yielded similar estimates of the number of visitors. The CUM was also used in the Northwest Florida Artificial Reef cited above.

The CUM basically uses estimates of the number of hotel and motel rooms, campsites and vacation rental units in the county along with utilization rates. Utilization rates for private hotels can be obtained from Smith Travel Services on a monthly or quarterly basis. The CUM has to be supplemented with estimates of the number of visitors that stay overnight with friends and relatives and the number of day visitors. The percent that stay with friends and relatives can be obtained from a state-wide survey conducted regularly by the State of Florida and from the survey of general visitors. Estimates of the number of day visitors is obtained from the survey of general visitors.

Once estimates of the total number of visitors is estimated using the CUM, the general visitors survey is also used to obtain estimates of the percent of all visitors that participate in boating activities by activity (e.g., fishing and diving) and boating mode (own boat, rental boat, charter boat, or party boat).

### 3) Survey of Non Resident Boating Visitors

The general visitor survey and CUM described above yields estimates of the number of boating visitors by activity and boating mode for each county. To estimate the number of party-days and person-days of use by activity and boat mode for artificial and natural reefs, the boating visitors survey is used. Here oversampling using equal sample sizes per season, activity and boat mode are used as shown in Table 1 above for each county. The experience of the researchers in the Northwest Florida Artificial Reef Study was used to establish the sample sizes needed to get reliable estimates for each season/activity/mode stratum for each county.

Sample site selection and respondent selection follows the same protocols as the general visitor survey as to exit conditions. Here respondents are screened for having participated (or going to participate in a boating activity before leaving) during their current visit to the county where interviewed.

Mail back questionnaires will be given to all on-site respondents that agree to participate in the mail back portion of the survey. Name, address and telephone number will be obtained so that follow-up efforts can be made if the mail backs have not been received in two weeks. Information obtained from the on-site survey will allow for segmentation of SPA and ER users and proper sample weighting for aggregation.

3. For the commercial fishing panels and the dive shops, non response will not be a problem. We expect a high level of cooperation because the different user groups have requested that we conduct such information collection efforts. Each of these user groups in the FKNMS think that the information collections proposed here are needed in the Socioeconomic Monitoring Program for the FKNMS.

For the survey of both resident and non resident boaters in Monroe County/Florida Keys, the mail back survey does present expected non response. Past experience yielded response rates between 47 and 56 percent for visitors and 28.7 percent for residents. Analyses were done on nonresponse bias for both sampled populations. For the resident sample, there were no significant differences for any of the importance or satisfaction ratings between weighted and unweighted data (i.e., the data weighted for non response). The same was true for the visitor samples. (see Vernon R. Leeworthy, "Technical Appendix: Sampling Methodologies and Estimation Methods Applied to the Florida Keys/Key West Visitors Surveys", December 1996. National Oceanic and Atmospheric Administration: Silver Spring, MD and Vernon R. Leeworthy and Peter C. Wiley, "Technical Appendix: Sampling Methodologies and Estimation Methods Applied to the Survey of Monroe County Residents", October 1997. National Oceanic and Atmospheric Administration: Silver Spring, MD). These reports can be found in portable document format at <http://www-orca.nos.noaa.gov/projects/econkeys/econkeys.html>. We will follow the same procedures as in the previous application in analyzing and adjusting for non response bias should it occur.

4. There is no need for additional testing. This survey is a repeat of the 1995-96 survey.
5. Contacts

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## **COMMERCIAL FISHING OPERATIONS**

### **IMPORTANT INFORMATION ABOUT THIS INFORMATION COLLECTION**

#### **1. Authorizations to Collect the Information**

The National Marine Sanctuaries Act (16 USC 1431, et seq.) and The Florida Keys National Marine Sanctuary and Protection Act (Public Law 101-605, Sec 7 (5) authorizes the Florida Keys National Marine Sanctuary to establish regulations to protect sanctuary resources or resolve user conflicts. This act also authorizes the Sanctuary to do research and collect information necessary for evaluating new regulations.

#### **2. How the Information Will Be Used**

The information being collected will be used to conduct financial performance analysis of representative samples of commercial fishing operations that may have been impacted by Sanctuary regulations. A Socioeconomic Monitoring Program has been established in the Florida Keys National Marine Sanctuary and the commercial fishing industry is an important component of this program.

#### **3. Statement of Burden**

Public reporting burden for this collection of information is estimated to average about three hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden, to Dr. Vernon R. (Bob) Leeworthy, Chief Economist, National Ocean Service, Special Projects Office, 1305 East West Highway, SSMC 4, 9<sup>th</sup> floor, Silver Spring, MD 20910.

#### **4. Your Participation and Protections of Confidentiality**

Your participation is voluntary. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless the collection of information displays a currently valid OMB Control Number.

Any information that identifies you or your business (name, name of business, address and telephone number) will not be given to anyone, including the government agencies sponsoring this information collection. The information that identifies you or your business will be destroyed by the contractor collecting the information at the end of the information collection. All other information will be available for distribution.

**COMMERCIAL FISHING**  
**Socioeconomic Profile Questionnaire**

Name \_\_\_\_\_

Telephone \_\_\_\_\_

Address or Contact Site \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1. Which of the following includes your age ?  
18 – 30    31 - 40    41 – 50    51 – 60    over 60

2. What is your racial/ethnic background ?
- a. White
  - b. Black or African American
  - c. American Indian or Alaska Native
  - d. Native Hawaiian or Other Pacific Islander
  - e. Asian
  - f. Other (specify) \_\_\_\_\_

Are you Hispanic, Latino, or of Spanish Origin ?    Yes \_\_\_\_    No \_\_\_\_

3. How many family members do you support (including yourself) ?  
myself only    2    3    4    5    6    7    greater than 7

4. Are you a member of any of the following groups ?

Chamber of Commerce	Yes ____	No ____
Environmental Group	Yes ____	No ____
Victims of NOAA	Yes ____	No ____
Conch Coalition	Yes ____	No ____
Monroe County Commercial Fishermen	Yes ____	No ____
Organized Fishermen of Florida	Yes ____	No ____

5. Do you belong to a fish house ?    Yes \_\_\_\_    No \_\_\_\_

- if yes, then which one ? \_\_\_\_\_

6. Which of the following would you describe as your primary hauling port/dock ?

____ Key West/Stock Island	____ Summerland Key
____ Big Pine Key	____ Marathon
____ Islamorada	____ Key Largo
____ Tavenier	____ Other _____

7. How many years have you been a commercial fishermen in Monroe County?

Less than 1 year    1-5    6-10    11-20    over 20 years

8. Please provide your BEST ESTIMATE of the replacement value for the following items used for commercial fishing in (*year of study*) ?

Vessels and electronic equipment:	\$ _____
Lobster Traps:   Number _____	\$ _____
Nets:               Number: _____	\$ _____
Other gear:	\$ _____

9. Please provide your BEST ESTIMATE for the following expenses in (*year of study*) ?

Docking fees:	\$ _____
Fish House Fees:	\$ _____
Interest payments on vessel (s):	\$ _____
Maintenance and repairs vessel (s):	\$ _____
Maintenance and repairs traps:	\$ _____
Maintenance and repairs gear:	\$ _____

10. What approximate percentage of your income is derived from commercial fishing ? \_\_\_\_%

11. Which of the following best describes your fishing occupation ?

- a. commercial/full-time
- b. commercial/part-time
- c. charterboat
- d. recreational

12. What approximate percentage of your income is derived from fishing in the Monroe County ?  
\_\_\_\_%

**COMMERCIAL FISHING  
MONROE COUNTY/FKNMS**

**Catch, Trips and Trip Costs by Fishery**

**1.Total Catch by Species and by Area**

The map shows the seven (7) areas for Monroe County and the Florida Keys National Marine Sanctuary. Please refer to this map and use the following table and give me your BEST ESTIMATE of your TOTAL CATCH in each fishery in (*year of study*) and the percent of catch in each area.

<b>Fishery</b>	<b>Pounds</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>Total</b>
Stone Crabs									100%
Lobster									100%
Shrimp									100%
Snapper/Grouper									100%
Mackerels									100%
Sharks									100%
Others									100%

**2.Total Number of Trips by Species and by Area**

Now use the following table and give your BEST ESTIMATE of the TOTAL NUMBER OF TRIPS in each fishery and the percent of total trips in each area.

<b>Fishery</b>	<b>Trips</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>Total</b>
Stone Crabs									100%
Lobster									100%
Shrimp									100%
Snapper/Grouper									100%
Mackerels									100%
Sharks									100%
Others									100%

**3.Trip Costs by Species**

Please use the following table and give me your BEST ESTIMATE of your costs for a TYPICAL TRIP in each of the fisheries you participated in during (*year of study*).

<b>Item</b>	<b>Stone Crabs</b>	<b>Lobster</b>	<b>Shrimp</b>	<b>Snapper/Grouper</b>	<b>Mackerels</b>	<b>Others</b>
Fuel and Oil						
Ice						
Bait						
Food & Supplies						
Spotter Plane						
Other						
Crew						

**MARINE LIFE COLLECTING  
MONROE COUNTY/FKNMS**

**CATCH, TRIPS AND COSTS**

**1.Total Catch by Species and by Area**

The map shows the seven (7) areas for Monroe County and the Florida Keys National Marine Sanctuary. Please refer to this map and use the following table and give me your BEST ESTIMATE of your TOTAL CATCH in each fishery in (*year of study*) and the percent of catch in each area.

Species	Numbers	1	2	3	4	5	6	7	Total
Fin Fish									100%
Invertebrates									100%
Plants									100%
Live Rock (lease) lbs.									100%
Live Sand (lbs)									100%
Others									100%

**2.Total Number of Trips by Species and by Area**

Now use the following table and give your BEST ESTIMATE of the TOTAL NUMBER OF TRIPS for each species and the percent of total trips in each area.

Species	Trips	1	2	3	4	5	6	7	Total
Fin Fish									100%
Invertebrates									100%
Plants									100%
Live Rock (lease)									100%
Live Sand									100%
Others									100%

**3.Trip Costs by Species**

Please use the following table and give me your BEST ESTIMATE of your costs for a TYPICAL TRIP in each of the fisheries you participated in during (*year of study*).

Item	Fin Fish	Invertebrates	Plants	Live Rock (lease)	Live Sand	Others
Fuel and Oil						
Ice						
Bait						
Food & Supplies						
Spotter Plane						
Other						
Crew						

## **DIVE SHOPS AND OPERATIONS**

### **IMPORTANT INFORMATION ABOUT THIS INFORMATION COLLECTION**

#### **1. Authorizations to Collect the Information**

The National Marine Sanctuaries Act (16 USC 1431, et seq.) and The Florida Keys National Marine Sanctuary and Protection Act (Public Law 101-605, Sec 7 (5) authorizes the Florida Keys National Marine Sanctuary to establish regulations to protect sanctuary resources or resolve user conflicts. This act also authorizes the Sanctuary to do research and collect information necessary for evaluating new regulations.

#### **2. How the Information Will Be Used**

The information being collected will be used to estimate the total amount of use in the Sanctuary Preservation Areas (SPAs) in the Florida Keys National Marine Sanctuary and also assess the need for additional artificial reefs in the area. A Socioeconomic Monitoring Program has been established in the Florida Keys National Marine Sanctuary and monitoring the use of the SPAs was considered to be a high priority element of the program.

#### **3. Statement of Burden**

Public reporting burden for this collection of information is estimated to average about 10 hours per year per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden, to Dr. Vernon R. (Bob) Leeworthy, Chief Economist, National Ocean Service, Special Projects Office, 1305 East West Highway, SSMC 4, 9<sup>th</sup> floor, Silver Spring, MD 20910.

#### **4. Your Participation and Protections of Confidentiality**

Your participation is voluntary. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless the collection of information displays a currently valid OMB Control Number.

Any information that identifies you or your business (name, name of business, address and telephone number) will not be given to anyone, including the government agencies sponsoring this information collection. The information that identifies you or your business will not be released to anyone pursuant to the Freedom of Information Act (5 USC Section 522(b)(4)). All other information will be available for distribution.



Site Locations: Write in Name of Sanctuary Preservation Area (SPA), Ecological Reserve (ER), or other reef or artificial reef/wreck name. If no name, put in Loran or GPS coordinates for site.

Dear Resident of Monroe County,

We recently interviewed you by telephone about your boating activities in the Florida Keys and you indicated you would be willing to complete this questionnaire. It is self-explanatory and should not take long to complete. Please record your answers accurately and legibly. Your answers represent many other people not included in this survey effort so it is very important that you return your questionnaire.

Your answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After completion of the project, all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

Dr. Mark Bonn  
Department of Hospitality Administration  
Florida State University  
Tallahassee, FL 32306-2026  
Telephone: 850-644-8244

Please note: It is very important that the same person who participated in the On-site interview also complete the questionnaire.

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This research is being funded by a partnership between the State of Florida's Fish and Wildlife Conservation Commission, Palm Beach, Broward, Dade, and Monroe Counties, and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 10 minutes, including time for reviewing instructions and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden, to Dr. Vernon R. Leeworthy, National Ocean Service, Special Projects Office, 1305 East West Highway, Silver Spring, MD 20910. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

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In this section, we are interested in identifying recreation site information which  
Is important to you, the visitor.

IMPORTANCE  
(in the ideal recreational setting for activities)

1a. Please read each statement and rate the importance of each item as it  
contributes to an ideal recreation/tourist setting for the activities you did  
in the Florida Keys/Florida Bay Area. If an item does not apply, indicate  
by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

1 = Not Important 2 = Somewhat Important 3 = Important

4 = Very Important 5 = Extremely Important

1) Clear water (high visibility).....	n/a	dk	1	2	3	4	5
2) Amount of living coral on the reefs.....	n/a	dk	1	2	3	4	5
3) Public Transportation.....	n/a	dk	1	2	3	4	5
4) Parking.....	n/a	dk	1	2	3	4	5
5) Many different kinds of fish and sea life to view.....	n/a	dk	1	2	3	4	5
6) Many different kinds of fish and sea life to catch.....	n/a	dk	1	2	3	4	5
7) Large numbers of fish.....	n/a	dk	1	2	3	4	5
8) Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles).....	n/a	dk	1	2	3	4	5
9) Uncrowded conditions.....	n/a	dk	1	2	3	4	5
10) Maps, brochures, and other tourist information.....	n/a	dk	1	2	3	4	5
11) Boat ramps/launching facilities.....	n/a	dk	1	2	3	4	5
12) Marina facilities.....	n/a	dk	1	2	3	4	5
13) Directional signs, street signs, mile markers.....	n/a	dk	1	2	3	4	5
14) Condition of roads and streets.....	n/a	dk	1	2	3	4	5
15) Cleanliness of streets and sidewalks.....	n/a	dk	1	2	3	4	5
16) Condition of bike paths and side walks/walking paths.....	n/a	dk	1	2	3	4	5
17) Shoreline access.....	n/a	dk	1	2	3	4	5
18) Designated swimming/beach areas.....	n/a	dk	1	2	3	4	5
19) Quality of beaches.....	n/a	dk	1	2	3	4	5
20) Service and friendliness of people.....	n/a	dk	1	2	3	4	5
21) Historic preservation (historic landmarks, houses, etc.).....	n/a	dk	1	2	3	4	5
22) Availability of public restrooms.....	n/a	dk	1	2	3	4	5
23) Value for the price.....	n/a	dk	1	2	3	4	5
24) Parks and specially protected areas.....	n/a	dk	1	2	3	4	5
25) Mooring buoys near coral reefs.....	n/a	dk	1	2	3	4	5

SATISFACTION

(with each of these items where you did activities  
in the Florida Keys/Florida Bay Area)

1 = Not Satisfied 2 = Somewhat Satisfied 3 = Satisfied

4 = Very Satisfied 5 = Extremely Satisfied

(circle response)

1b. On the previous page you indicated the importance of a list of items to your recreation/  
tourist experiences. Now please read each of the items on this list and rate how satisfied  
you were with each at the places you did your activities in the Florida Keys/Florida Bay  
Area. If the item does not apply, indicate by circling n/a (not applicable). Likewise, if you  
Don't know, circle (dk).

1) Clear water (high visibility).....	n/a	dk	1	2	3	4	5
2) Amount of living coral on the reefs.....	n/a	dk	1	2	3	4	5
3) Public Transportation.....	n/a	dk	1	2	3	4	5
4) Parking.....	n/a	dk	1	2	3	4	5
5) Many different kinds of fish and sea life to view.....	n/a	dk	1	2	3	4	5
6) Many different kinds of fish and sea life to catch.....	n/a	dk	1	2	3	4	5
7) Large numbers of fish.....	n/a	dk	1	2	3	4	5
8) Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles).....	n/a	dk	1	2	3	4	5
9) Uncrowded conditions.....	n/a	dk	1	2	3	4	5
10) Maps, brochures, and other tourist information.....	n/a	dk	1	2	3	4	5
11) Boat ramps/launching facilities.....	n/a	dk	1	2	3	4	5
12) Marina facilities.....	n/a	dk	1	2	3	4	5
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14) Condition of roads and streets.....	n/a	dk	1	2	3	4	5
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24) Parks and specially protected areas.....	n/a	dk	1	2	3	4	5
25) Mooring buoys near coral reefs.....	n/a	dk	1	2	3	4	5

Dear Visitor,

During your recent trip to the Florida Keys you indicated that you would be willing to complete this questionnaire. It is self-explanatory and should not take long to complete. Please record your answers accurately and legibly. Your answers represent many other people not included in this survey effort so it is very important that you return your questionnaire.

Your answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After completion of the project, all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

Dr. Grace Johns  
Hazen and Sawyer  
4000 Hollywood Boulevard  
Seventh Floor, North Tower  
Hollywood, FL 33021  
Telephone: 954-987-0066

Please note: It is very important that the same person who participated in the On-site interview also complete the questionnaire.

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EXPIRATION DATE:

## IMPORTANCE

(in the ideal recreational setting for activities)

1 = Not Important   2 = Somewhat Important   3 = Important

in the Florida Keys/Florida Bay Area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

[illegible]

SATISFACTION

(with each of these items where you did activities  
in the Florida Keys/Florida Bay Area)

1 = Not Satisfied 2 = Somewhat Satisfied 3 = Satisfied

4 = Very Satisfied 5 = Extremely Satisfied

(circle response)

1b. On the previous page you indicated the importance of a list of items to your recreation/  
tourist experiences. Now please read each of the items on this list and rate how satisfied  
you were with each at the places you did your activities in the Florida Keys/Florida Bay  
Area. If the item does not apply, indicate by circling n/a (not applicable). Likewise, if you  
Don't know, circle (dk).

1) Clear water (high visibility).....	n/a	dk	1	2	3	4	5
2) Amount of living coral on the reefs.....	n/a	dk	1	2	3	4	5
3) Public Transportation.....	n/a	dk	1	2	3	4	5
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5) Many different kinds of fish and sea life to view.....	n/a	dk	1	2	3	4	5
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7) Large numbers of fish.....	n/a	dk	1	2	3	4	5
8) Opportunity tot view large wildlife: (manatees, whales, dolphins, sea turtles).....	n/a	dk	1	2	3	4	5
9) Uncrowded conditions.....	n/a	dk	1	2	3	4	5
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25) Mooring buoys near coral reefs.....	n/a	dk	1	2	3	4	5